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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/576,930

04/24/2006

Mary-Luc Champel

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24498

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03/03/2009

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EXAMINER

CHASE, SHELLY A

ART UNIT

PAPER NUMBER

2112

MAIL DATE

DELIVERY MODE

03/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,930	Applicant(s) CHAMPEL, MARY-LUC	
	Examiner Shelly A. Chase	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 8, 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 9 and 10 is/are rejected.
- 7) ☒ Claim(s) 2, 3 & 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4-24-2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 to 12 are presented for examination. acknowledgment is made of the preliminary amendment filed 4-26-2006.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119, which papers have been placed of record in the file.

Information Disclosure Statement

3. The references listed in the information disclosure statement submitted on 4-24-2006 have been considered by the examiner (see attached PTO-1449).

4. The reference cited on page 6 of the specification should be listed on the IDS and a copy provided since applicant's invention is an improvement over this reference (please provide a copy of the reference).

Specification

5. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A

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COMPACT DISC.

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

6. Claims 9 and 11 are objected to because of the following informalities: please correct the seemingly antecedent basis error, "the rows" and "the columns" recited on line 5.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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8. Claim **9** is rejected under 35 U.S.C. 102(e) as being anticipated by Bushmitch et al. (USP 7020823 B2).

Claim **9**:

Bushmitch teaches an error resilient method and apparatus for coding, transmitting and /or storing digital multimedia data, the apparatus includes a typical distributed media server system that transmit packets over multiple transmission channels through network (316) (see col. 5, lines 10 to 25), the system comprising the steps of: applying a Reed Solomon code ("correction function") to a set of digital video (DV) segments organized in a matrix of multiple rows and columns to generate a FEC packet ("correction packet") (see col. 7, lines 33 to 60). Bushmitch also teaches that an alternative embodiment know in the art applies FEC code to the columns in a matrix generating a FEC packet that is transmitted and use for repairing lost packets associated with the columns (see col. 2, lines 38 to 55).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims **1, 4 to 5 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bushmitch et al. (USP 7020823 B2).

Claim **1**:

Bushmitch substantially teaches the claimed invention. Bushmitch teaches an error resilient method and apparatus for coding, transmitting and /or storing digital multimedia data, the method comprising the steps of: organizing the channel blocks into a matrix of rows and columns (see col. 2, lines 19 to 30 and col. 7, lines 38 to 46) and applying a Reed Solomon to each row of the matrix (see col. 2, lines 25 to 30 and col. 7, lines 47 to 55). Bushmitch also teaches that a forward error correction (FEC) packet ("correction packet") is created when a Reed Solomon code is applied to the rows of the matrix and the FEC packet is use for recovery of lost packets as well as, the FEC packet is transmitted or stored with the data packets (see col. 7, line 61 to col. 8, line 21).

Bushmitch teaches an alternative embodiment know in the art applies FEC code to the columns in a matrix generating a FEC packet that is transmitted and use for repairing lost packets associated with the columns (see col. 2, lines 38 to 55).

Bushmitch does not specifically teach applying the correction function to each row and each column of the matrix, however, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to realize that the method of Bushmitch would have comprise applying a correction function to each row and each column, since Bushmitch teaches that creating FEC packets for effective error recovery of data that are transmitted or stored involves applying a FEC code ("correction function") to the rows and/or the columns in a matrix of the data (see col. 2, lines 19 et seq.). One having ordinary skill in the art would have been motivated to employ a method for error resilient coding as taught by Bushmitch.

As per claims **4** and **5**, Bushmitch teaches that the matrix has a header row that identifies the FEC procedure used and that the FEC packet is transmitted with the other data packets (see col. 8, lines 1 to 21).

As per claim **10**, Bushmitch teaches an error resilient method and apparatus for coding, transmitting and /or storing digital multimedia data, the apparatus includes a typical distributed media server system comprising the steps of: organizing the channel blocks into a matrix of rows and columns (see col. 2, lines 19 to 30 and col. 7, lines 38 to 46) and applying a Reed Solomon to each row of the matrix (see col. 2, lines 25 to 30 and col. 7, lines 47 to 55). Bushmitch also teaches that a forward error correction (FEC) packet ("correction packet") is created when a Reed Solomon code is applied to the rows of the matrix and the FEC packet is use for recovery of lost packets as well as, the FEC packet is transmitted or stored with the data packets (see col. 7, line 61 to col. 8, line 21).

Bushmitch teaches an alternative embodiment know in the art applies FEC code to the columns in a matrix generating a FEC packet that is transmitted and use for repairing lost packets associated with the columns (see col. 2, lines 38 to 55).

Bushmitch does not specifically teach applying the correction function to each row and each column of the matrix, however, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to realize that the method of Bushmitch would have comprise applying a correction function to each row and each column, since Bushmitch teaches that creating FEC packets for effective error recovery of data that are transmitted or stored involves applying a FEC code ("correction

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function”) to the rows and/or the columns in a matrix of the data (see col. 2, lines 19 et seq.). One having ordinary skill in the art would have been motivated to employ a method for error resilient coding as taught by Bushmitch.

Allowable Subject Matter

11. Claims 2, 3 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claims 7 to 8 and 11 to 12 are allowed.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelly A. Chase whose telephone number is 571-272-3816. The examiner can normally be reached on Mon-Fri from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Jacques Louis-Jacques can be reached on 571-272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shelly A Chase/
Primary Examiner, Art Unit 2112